

Appl. No. 10/605,252
Amdt. dated February 23, 2005
Reply to Office action of December 16, 2004

REMARKS/ARGUMENTS

1. Objection to claim 11:

Claim 11 is objected to because it appears to be a substantial duplicate of claim 10.

Response:

- 5 Claim 11 has been amended to depend on claim 7 instead of depending on claim 1. Accordingly, the terms first element and second element have been amended to agree with claim 7. Acceptance of the amended claim 11 is requested.

2. Rejection of claims 1-11 under 35 U.S.C. 112, second paragraph:

- 10 Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Response:

- 15 Claim 1 is currently amended to specify that the first and second elements are both formed out of magnetic permeable material. This amendment is supported in paragraphs 0027 and 0028. No new matter is added through this amendment to claim 1. Reconsideration of claim 1 is respectfully requested.

3. Rejection of claims 1-5, 10, and 11 under 35 U.S.C. 102(b):

- 20 Claims 1-5, 10, and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Kono et al (US 2001/0009366).

Response:

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Claim 1 has been amended to distinguish from Kono et al. Claim 1 now recites that the first and second elements are aligned such that a first axis extends through both the first and second elements. Further, the first element is moved toward the second element along the first axis until the magnetic flux detected by the magnetic sensor reaches a predetermined value. These amendments are supported by Fig. 1 and by paragraphs 0018 to 0020 of the specification. As shown in Fig. 1, the magnetic flux between the first element 14 and the second element 16 changes as the first element 14 is moved toward the second element 16 along the vertical axis 18. The first element 14 is moved along the vertical axis 18 until the magnetic sensor 12 determines that the magnetic flux has reached a predetermined value.

On the other hand, Kono et al. only teach rotating a first element 24 about a central axis (i.e. the Z-axis) while keeping a second element 25 static. Kono et al. do not teach moving the first element toward the second element along an axis common to both the first and second elements, as is recited in the currently amended claim 1. Therefore, Kono et al. do not anticipate the currently amended claim 1, and claim 1 should be allowable over the Kono et al. reference. Claims 2-5, 10, and 11 are dependent on claim 1, and should be allowed if claim 1 is allowed. Reconsideration of claims 1-5, 10, and 11 is respectfully requested.

4. Rejection of claim 1 under 35 U.S.C. 102(b):

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Tanaka (US 4,657,451).

Response:

The applicant would like to point out how claim 1 is patentably distinguished from the Tanaka reference. Claim 1 contains the limitation "moving the first element toward the second element along the first axis until the magnetic flux detected by the magnetic sensor reaches a predetermined value." In other words, movement of the first element is controlled by the magnetic flux measured by the magnetic sensor.

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On the other hand, Tanaka teaches moving a tool element (first element) 4 towards a workpiece (second element) 5 until a "high frequency electric current H" is generated upon contact between the tool element 4 and the workpiece 5 (col.4, lines 6-12). Tanaka explains that the high frequency electric current H is the output signal S1 emerging from the sensor unit 6 (col.4, lines 18-20). As shown in Fig.4 and explained in col.4, lines 21-25, the detection signal S6 is generated from the output signal S1, and the detection signal S6 indicates the start of contact between the tool element 4 and the workpiece 5.

Therefore, Tanaka teaches moving a first element toward a second element until a high frequency electric current is detected, and does not teach "moving the first element toward the second element along the first axis until the magnetic flux detected by the magnetic sensor reaches a predetermined value." For this reason, claim 1 is patentably distinct over the Tanaka reference. Reconsideration of claim 1 is respectfully requested.

5. Rejection of claim 6 under 35 U.S.C. 103(a):

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kono et al (US 2001/0009366) in view of Ghibu et al. (US 3,849,724).

Response:

Claim 6 is dependent on claim 1, and should be allowed if claim 1 is found allowable. Reconsideration of claim 6 is respectfully requested.

6. Rejection of claims 7-9 under 35 U.S.C. 103(a):

Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka (US 4,657,451) in view of admitted prior art.

Response:

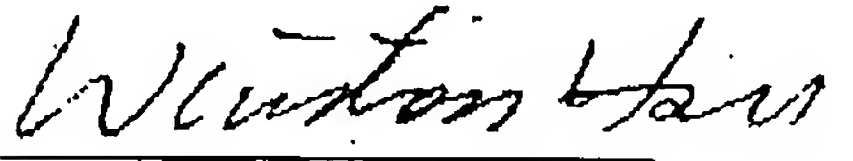
Claims 7-9 are dependent on claim 1, and should be allowed if claim 1 is found

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allowable. Reconsideration of claims 7-9 is respectfully requested.

In view of the above patentable differences between currently amended independent claim 1 and the cited prior art, the applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Sincerely yours,



Date: February 24, 2005

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15 Note: Please leave a message in my voice mail if you need to talk to me. The time in D.C. is 13 hours behind the Taiwan time, i.e. 9 AM in D.C. = 10 PM in Taiwan).